In the Claims:

1-2. (canceled)

3. (currently amended) A method for detecting a compound capable of modulating TGF-β superfamily signalling, said method comprising the steps of:

(a) providing a cell having:

(i) a reporter gene operably linked to a DNA-binding-protein recognition site;

(ii) a first fusion gene capable of expressing a first fusion protein, said first fusion protein comprising a Smad3 polypeptide or fragment ~~of Smad3~~ thereof, wherein said Smad3 polypeptide or fragment thereof has an amino acid sequence selected from the group consisting of SEQ ID NOs: 8 and 9 covalently bonded to a binding moiety, said binding moiety capable of specifically binding to said DNA-binding-protein recognition site; and

(iii) a second fusion gene capable of expressing a second fusion protein, said second fusion protein comprising a polypeptide fragment of FAST-1, wherein said FAST-1 polypeptide has an amino acid selected from the group consisting of SEQ ID NOs: 11, 12, 14, 15, 17, and 18, and wherein said FAST-1 polypeptide or fragment thereof is capable of interacting with said Smad3 polypeptide thereof, and wherein said FAST-1 polypeptide thereof is covalently bonded to a gene activating moiety;

(b) exposing said cell to said compound under conditions such that said FAST-1 polypeptide or fragment thereof and said Smad3 polypeptide or fragment thereof interact under conditions such that said binding moiety and said gene activating moiety interact and stimulate reporter gene expression in said cell; and

(c) measuring the level of reporter gene expression in said cell, a change in said reporter gene expression in the presence of said test compound indicating said compound is capable of modulating TGF-β superfamily signalling.

4. (currently amended) A method for detecting a compound capable of modulating TGF-β superfamily signalling, said method comprising the steps of:

(a) providing a cell having:

(i) a reporter gene operably linked to a DNA-binding-protein recognition site;

(ii) a first fusion gene capable of expressing a first fusion protein, said first fusion protein comprising a FAST-1 polypeptide or fragment ~~of FAST-1~~, wherein said FAST-1 polypeptide has an amino acid selected from the group consisting of SEQ ID NOs: 14, 15, 17, and 18 covalently bonded to a binding moiety, said binding moiety capable of specifically binding to said DNA-binding-protein recognition site; and

(iii) a second fusion gene capable of expressing a second fusion protein, said second fusion protein comprising a Smad3 polypeptide or fragment ~~of Smad3~~ thereof, wherein said Smad3 has an amino acid sequence selected from the group consisting of SEQ ID NOs: 8 and 9, wherein said Smad3 polypeptide or fragment thereof is capable of interacting with said FAST-1 polypeptide or fragment thereof; and wherein said Smad3 polypeptide or fragment thereof is covalently bonded to a gene activating moiety;

(b) exposing said cell to said compound under conditions such that said FAST-1 polypeptide or fragment thereof and said Smad3 polypeptide or fragment thereof interact under conditions such that said binding moiety and said gene activating moiety interact and stimulate reporter gene expression in said cell; and

(c) measuring the level of reporter gene expression in said cell, a change in said reporter gene expression in the presence of said test compound indicating said compound is capable of modulating TGF-β superfamily signalling.

5-6. (canceled)

7. (currently amended) A cell for detecting a compound capable of modulating TGF-β superfamily signalling, said cell having:

(a) a reporter gene operably linked to a DNA-binding-protein recognition site;

(b) a first fusion gene capable of expressing a first fusion protein, said first fusion protein comprising a Smad3 polypeptide or fragment ~~of Smad3~~ thereof, wherein said Smad3 has an amino acid sequence selected from the group consisting of SEQ ID NOs: 8 and 9 covalently bonded to a binding moiety, said binding moiety capable of specifically binding to said DNA-binding-protein recognition site; and

(c) a second fusion gene capable of expressing a second fusion protein, said second fusion protein comprising a FAST-1 polypeptide or fragment ~~of FAST-1~~, wherein said FAST-1 polypeptide has an amino acid selected from the group consisting of SEQ ID NOs: 14, 15, 17, and 18, and wherein said FAST-1 polypeptide or fragment thereof is capable of interacting with said Smad3 polypeptide thereof, and wherein said FAST-1 polypeptide thereof is covalently bonded to a gene activating moiety.

8. (currently amended) A cell for detecting a compound capable of modulating TGF-β superfamily signalling, said cell having:

(a) a reporter gene operably linked to a DNA-binding-protein recognition site;

(b) a first fusion gene capable of expressing a first fusion protein, said first fusion protein comprising a FAST-1 polypeptide or fragment ~~of FAST-1~~, wherein said FAST-1 polypeptide has an amino acid selected from the group consisting of SEQ ID NOs: 14, 15, 17, and 18 covalently bonded to a binding moiety, said binding moiety capable of specifically binding to said DNA-binding-protein recognition site; and

(c) a second fusion gene capable of expressing a second fusion protein, said second fusion protein comprising a Smad3 polypeptide or fragment ~~of Smad3~~ thereof, wherein said Smad3 has an amino acid sequence selected from the group consisting of SEQ ID NOs: 8 and 9; and wherein said Smad3 polypeptide or fragment thereof is capable of interacting with said FAST-1 polypeptide and wherein said Smad3 polypeptide or fragment thereof is covalently bonded to a gene activating moiety.

9-10. (canceled)

11. (currently amended) A method for detecting a compound capable of modulating TGF-β superfamily signalling, said method comprising the steps of:

(a) providing a first polypeptide, said first polypeptide comprising a FAST-1 polypeptide or fragment ~~of FAST-1~~, wherein said FAST-1 polypeptide has an amino acid selected from the group consisting of SEQ ID NOs: 14, 15, 17, and 18;

(b) providing a second polypeptide, said second polypeptide comprising a Smad3 polypeptide or fragment ~~of Smad3~~ thereof, wherein said Smad3 has an amino acid sequence selected from the group consisting of SEQ ID NOs: 8 and 9;

(c) exposing said first polypeptide to said second polypeptide and to said compound; and

(d) measuring the level of interaction between said first polypeptide and said second polypeptide, an alteration in said level of interaction indicating said compound is capable of modulating TGF-β superfamily signalling.

12-14. (canceled)

15. (currently amended) A method for detecting a compound capable of modulating TGF-β superfamily signalling, said method comprising the steps of:

(a) providing a reporter gene operably linked to a DNA-binding-protein recognition site;

(b) providing a first fusion protein, said first fusion protein comprising a FAST-1 polypeptide or fragment ~~of FAST-1~~, wherein said FAST-1 polypeptide has an amino acid selected from the group consisting of SEQ ID NOs: 14, 15, 17, and 18 covalently bonded to a binding moiety, said binding moiety capable of specifically binding to said DNA-binding-protein recognition site;

(c) providing a second fusion protein, said second fusion protein comprising a Smad3 polypeptide or fragment ~~of Smad3~~ thereof, wherein said Smad3 has an amino acid sequence selected from the group consisting of SEQ ID NOs: 8 and 9 and wherein said Smad3 polypeptide or fragment thereof is capable of interacting with said FAST-1 polypeptide and wherein said Smad3 polypeptide or fragment thereof is covalently bonded to a gene activating moiety;

(d) exposing said first fusion protein to said second fusion protein, to said reporter gene, and to said compound under conditions such that said Smad3 polypeptide or fragment thereof and said FAST-1 polypeptide or fragment thereof interact under conditions such that said binding moiety and said gene activating moiety interact and stimulate reporter gene expression in said cell; and

(e) measuring the level of reporter gene expression, a change in said level of reporter gene expression in the presence of said test compound indicating a compound capable of modulating TGF-β superfamily signalling.

16. (currently amended) A method for detecting a compound capable of modulating TGF-β superfamily signalling, said method comprising the steps of:

(a) providing a reporter gene operably linked to a DNA-binding-protein recognition site;

(b) providing a first fusion protein, said first fusion protein comprising a Smad3 polypeptide or fragment ~~of Smad3~~ thereof, wherein said Smad3 has an amino acid sequence selected from the group consisting of SEQ ID NOs: 8 and 9 covalently bonded to a binding moiety, said binding moiety capable of specifically binding to said DNA-binding-protein recognition site;

(c) providing a second fusion protein, said second fusion protein comprising a FAST-1 polypeptide or fragment ~~of FAST-1~~ thereof, wherein said FAST-1 polypeptide has an amino acid selected from the group consisting of

SEQ ID NOs: 14, 15, 17, and 18 and wherein said FAST-1 polypeptide or fragment thereof is capable of interacting with said Smad3 polypeptide and wherein said FAST-1 polypeptide or fragment thereof is covalently bonded to a gene activating moiety;

(d) exposing said first fusion protein to said second fusion protein, to said reporter gene, and to said compound under conditions such that said Smad3 polypeptide or fragment thereof and said FAST-1 polypeptide or fragment thereof interact under conditions such that said binding moiety and said gene activating moiety interact and stimulate reporter gene expression in said cell; and

(e) measuring the level of reporter gene expression, a change in said level of reporter gene expression in the presence of said test compound indicating a compound capable of modulating TGF-β superfamily signalling.